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An Unprecedented Slowdown?

In comparison to other postwar recessions in the U.S., the recession of 1990–1991 could be considered "mild." Real output declined by around 1½ percent over the last quarter of 1990 and the first quarter of 1991, and since then has grown at a sluggish rate. In other recessions, the average real output decline was about twice that rate.

Yet pessimism about the prospects for the U.S. economy persists. One explanation is that this recession occurred during the country's longest period of slow economic growth. The growth rate or real gross domestic product (GDP) has been below 2 percent for eleven straight quarters now (that is, every quarter since the second quarter of 1989), which is a first for the U.S. economy in the postwar era.

This *Weekly Letter* looks at the data to determine how well the economy has been doing recently compared to past recessions. It turns out that unusually slow growth of the economy's work force is an important reason why the most recent three-year period looks worse than similar periods around other recessions. Further, this slowdown in the growth rate of the work force appears to be unrelated to recent developments in the economy. An important implication is that monetary and fiscal policies cannot be used to offset the effects of these (demographic) changes on the growth rate of real output.

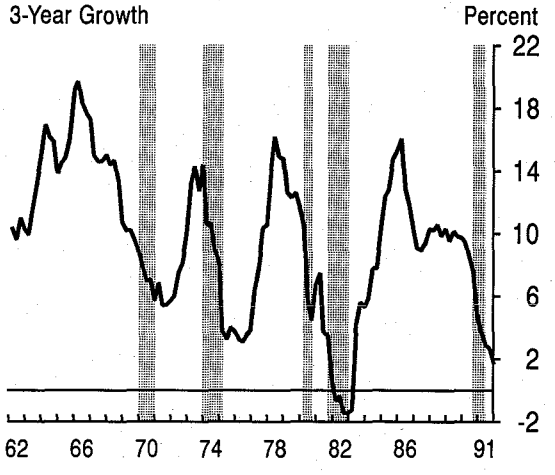
Sluggish GDP growth

Most experts believe that the economy bottomed out somewhere in the second quarter of 1991. If this is correct, then the recession of 1990–91 was relatively mild. McNees (1992) of the Boston Fed points out that the declines in real output and employment were about half as large as the average decline over prior postwar recessions, while the *increase* in the unemployment rate was smaller than in any other recession. (The unemployment rate did reach a higher *level* than during the 1953 or the 1969–1970 recessions.)

Although the recession was not unusually deep, it occurred during the longest period of slow economic growth in postwar U.S. history—the annual growth rate of real GDP has remained below 2 percent since the second quarter of 1989. And this *is* an unusual performance by historical standards. According to Runkle (1991), the current slowdown is already eleven quarters long, and no other postwar slowdown has lasted more than seven quarters. (He defines a "slowdown" as a period in which real output grows at a rate below 3.2 percent, the average rate for the postwar U.S. economy.)

Chart 1 presents data on real GDP growth over three-year intervals to allow an easy comparison between the recent slowdown and earlier episodes. More precisely, the chart shows the percentage increase in real GDP over the prior three years for every quarter over the 1962.Q1–1991.Q4 interval. Given that real GDP data at this point go back only to 1959, measuring growth over the prior three years implies that the charts begin in 1962.Q1. The chart shows that the worst decline in real GDP growth (over a three-year period) occurred in 1982. The next worse performance is the current slowdown; for the last year or so real GDP growth has remained below the levels of the 1969–1970 and 1974–1975 recessions. Thus, the comparison in the chart reveals that things are somewhat worse than would be suggested by a simple comparison of real GDP growth in this recession with prior recessions.

Chart 1
Real GDP
3-Year Growth



The implications of this finding depend upon what is behind this slowdown in growth. For instance, we can think of slow real GDP growth as resulting either from a decline in the average worker's productivity, or from a reduction in the number of workers. Slow real GDP growth due to a decline in productivity growth would be a problem, since it could then have implications for individuals' living standards. But, if slow real GDP growth were due to slower growth in the work force that is unrelated to economic developments, then it would not have the same adverse implications for individuals' living standards.

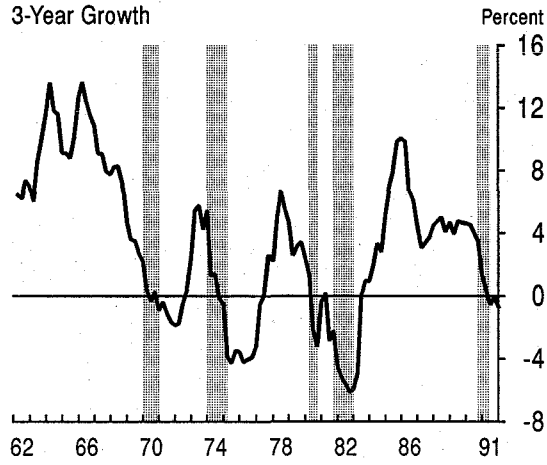
Adjusting for changes in the work force

In looking at real GDP growth in terms of productivity growth and work force growth, it is critical to choose the right measure of the work force. For example, looking at real GDP per employed worker (or even real GDP per hour worked) could give too optimistic a picture of the decline in real GDP during a slowdown, because the number of employed workers declines during a slowdown. Therefore, we need a measure of the work force that is as independent of economic conditions as possible.

A reasonable starting point is the labor force, which includes employed workers as well as those who are looking for employment. Chart 2 shows the growth in real GDP per member of the labor force over a three-year period and reveals that, once we adjust for changes in the labor force, the recent slowdown no longer looks so bad; in fact, it is the mildest of the five recessions on record. Thus, unusually slow labor force growth seems to be an important contributor to slow real GDP growth over the past three years.

It is possible that using the labor force to deflate real GDP understates the extent of the recent deterioration of the economy. The problem is that the measured labor force is not completely independent of recent economic developments either. For example, it does not account for "discouraged workers." If an unusually large number of people are discouraged about the prospects of finding a job because of the length of the latest slowdown, then the labor force may be smaller than normal at this stage in the cycle. In that case, deflating real GDP by the labor force would present too good a picture of the current state of the economy.

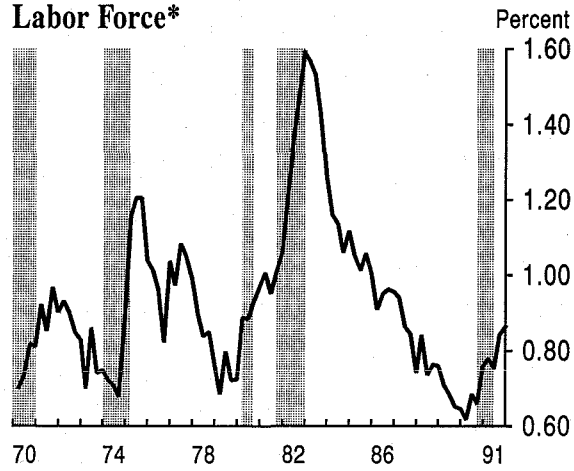
Chart 2
Real GDP Per Worker*



*Labor force participant.

To see whether there is an unusually high number of discouraged workers right now, Chart 3 presents the ratio of discouraged workers to the augmented labor force. (Data on discouraged workers is only available since 1970.) The augmented labor force is defined as the sum of the labor force plus discouraged workers in order to prevent the measured labor force from becoming artificially small during recessions. The chart shows no evidence to suggest that the discouraged worker problem is especially acute at this time; in fact, the plotted ratio is lower than it has

Chart 3
Ratio of Discouraged Workers to Labor Force*



*Labor force is defined to include discouraged workers.

been after any other recession. Nor does the increase in discouraged workers since the beginning of the recession appear to be unusually large this time around.

A second potential problem with using the labor force to deflate real GDP involves recent declines in the participation rate. One hypothesis about the decline is that younger workers are discouraged by the state of the economy and have decided to go back to school. If this is true, they would not show up in the discouraged worker count, but they would make the measured labor force smaller than it would otherwise be and thus would tend to make Chart 2 look better than it otherwise would.

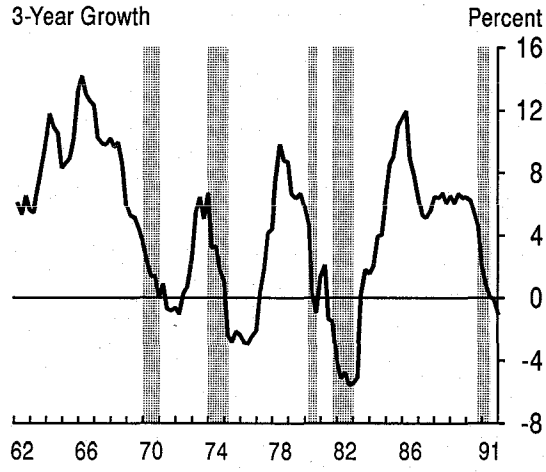
To control for this possible bias, Chart 4 plots the growth of real GDP per adult, defined as an individual who is 16 years of age or older. Since the adult population is completely independent of short-run developments in the economy, its use avoids some of the problems caused by using the labor force to deflate real output. At the same time, it should be kept in mind that the adult population is not the correct measure of the economy's work force either, since it includes people who are not looking for work.

Chart 4 shows that the recent behavior of real GDP per adult is not worse than it has been during prior recessions. Thus, the inference from Chart 2—that the growth of real GDP per worker during the last three years is no worse than that observed during prior recessions—appears to be appropriate. This implies that some of the unusually slow growth of real GDP over the last three years is simply the result of changes in the U.S. work force that are unrelated to current economic conditions. These changes have no implications for the productivity of U.S. workers.

Conclusion

It is worth reiterating what this *Letter* does not try to show. The results presented here are not meant to deny that the economy has been sluggish for

Chart 4
Real GDP Per Adult*



*Individuals 16 years of age or older.

quite a while or that the recovery so far has been noticeably weaker than the average postwar recovery. Instead, this analysis shows that part of the reason for slow output growth over the past few years has to do with a slowdown in the growth of the economy's work force. This has important implications for the conduct of policy. While monetary and fiscal policies can be used to offset the effects of deficient demand in the economy, they cannot be used to offset slower output growth resulting from demographic changes in the economy's work force.

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